

a1
cont

electrode 50. A semiconductor layer 54 is formed on the gate insulating layer 52. The source and drain electrodes 56 and 58 are spaced apart from each other and overlap both end portions of the semiconductor layer 54, respectively. A passivation film 60 is formed over the whole substrate 1 while covering the source and drain electrodes 56 and 58 and the semiconductor layer 54. The semiconductor layer 54 includes an amorphous silicon layer and 7a doped semiconductor layer. A portion of the doped semiconductor layer between the source and drain electrodes is etched to form a channel region.--

Please replace the paragraph beginning on page 4, line 20, with the following rewritten paragraph:

a2

--In a third preferred embodiment, the thin film transistor further includes: an active layer having source and drain regions at both end portions thereof; a gate insulating layer on a central portion of the active layer other than the source and drain regions; a gate electrode formed on the gate insulating layer; and an inter layer insulator formed over the substrate, having first and second contact holes for respectively exposing a portion of the source and drain regions, wherein the source and drain electrodes are formed on the inter layer insulator to respectively contact with the source and drain regions. The active layer can be made of polysilicon. The liquid crystal display device may include a light shielding

A3
Cont. layer formed between the substrate and the thin film transistor and an insulating layer covering the light shielding layer.--

Please replace the paragraph beginning on page 6, line 9, with the following rewritten paragraph:

A3 --In a third preferred embodiment, the method further includes forming a light shielding layer before forming the thin film transistor; and forming an insulating layer for covering the light shielding layer. The active layer can be made of amorphous silicon. Forming the thin film transistor includes: forming a pure semiconductor layer; forming a gate insulating layer, a width of the gate insulating layer being smaller than the pure semiconductor layer; forming a gate electrode on the gate insulating layer; ion-doping an exposed portion of the pure semiconductor layer to define source and drain regions; forming an interlayer insulator over the substrate, the interlayer including a source region contact hole on a portion of the source electrode and a drain region contact hole on a portion of the drain electrode; and forming source and drain electrodes, the source and drain electrodes electrically contacting with the source and drain regions, respectively. The pure semiconductor layer can be made of polysilicon.--

Please replace the paragraph beginning on page 8, line 7, with the following rewritten paragraph:

Q4 --Fig. 6 is a plan view illustrating an array substrate for use in a liquid crystal display according to the present invention. The array substrate has gate lines 101a in a transverse direction, data lines 101b arranged in a longitudinal direction perpendicular to the gate lines 101a. Patterns of the semiconductor layer and pixel electrode are not shown for simplicity. Figs. 3A to 5E are cross sectional views taken along line I-II of Fig. 6, illustrating fabrication process steps of an array substrate having color filters according to the present invention.--

Please replace the paragraph beginning on page 9, line 9, with the following rewritten paragraph:

Q5 --Then, as shown in Fig. 3C and Fig. 6, a color filter 112 including color filter layers R(red), G(green) and B(blue) is formed in a stripe shape. In order to form the color filter 112 including the color filter layers of R, G and B, a process of depositing a color resin and patterning it is repeated three times. At this point, the color filter 112 for each TFT overlaps an side portion of the data line 101b and an end portion of the drain electrode 108, denoted as the regions "T" in Fig. 3C, so as to prevent light leakage and to improve an aperture ratio. Because boundary of adjacent color filter stripes is located on the center portion of the data line, it can

Q5
Cont provide a sharp, immutable boundary between color filter stripe. Bleeding of adjoining color filters to each other and blurring of boundaries can be also avoided. The color filter can overlap a portion of source electrode 106. Thereafter, using the source and drain electrodes 106 and 108 as a mask, a portion of the doped amorphous silicon layer 104b between the source and drain electrodes 106 and 108 is etched by a dry or a wet-etching technique to form a channel region. --

Please replace the paragraph beginning on page 11, line 6, with the following rewritten paragraph:

Q4 --A third preferred embodiment of the present invention relates to an LCD device having the COT structure and using a coplanar type TFT as a switching element. Figs. 5A to 5E are cross sectional views illustrating a process of manufacturing the LCD device according to the third preferred embodiment of the present invention. First, as shown in Fig. 5A, a light shielding layer 200 is formed on a substrate 1. The light shielding layer 200 serves to protect an active layer 204 from light. A first insulating layer 202 is formed on the substrate 1 while covering the light shielding layer 200.--

Please replace the paragraph beginning on page 12, line 1, with the following rewritten paragraph:

--Subsequently, as shown in Fig. 5C, a third insulating layer 210 is formed over the whole substrate 1. The third insulating layer 210 serves as an interlayer insulator. The third insulating layer 210 includes source and drain contact holes 212 and 214 to respectively expose the source and drain regions 204c and 204d.--

Please replace the paragraph beginning on page 12, line 5, with the following rewritten paragraph:

A7 --Next, as shown in Fig. 5D, source and drain electrodes 216 and 218 are formed on the third insulating layer 210 and are electrically connected with the source and drain regions 204c and 204d through the source and drain contact holes 212 and 214, respectively. Thereafter, a color filter 220 (including the color filter layers R, G and B) is formed to respectively overlap side portions of the data line 101b and drain electrode 218. In other words, the color filter layers R overlap side portions of the data line 101b, and the color filter layers G overlap end portions of the drain electrode 218 as shown in Fig. 6. The color filter can be overlap a portion of source electrode 216. The reason for this overlap is to prevent light leakage, to improve an aperture ratio and to have a sharp boundary between adjoining two color filter stripes.--